

117TH CONGRESS
1ST SESSION

H. R. 5156

To promote the use of smart technologies and systems in communities, and
for other purposes.

IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 3, 2021

Ms. CLARKE of New York introduced the following bill; which was referred
to the Committee on Transportation and Infrastructure

A BILL

To promote the use of smart technologies and systems in
communities, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

4 (a) SHORT TITLE.—This Act may be cited as the
5 “Smart Technologies for Accessible and Resilient Trans-
6 portation Act” or the “START Act”.

7 (b) TABLE OF CONTENTS.—The table of contents for
8 this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Purpose.
- Sec. 3. Definitions.
- Sec. 4. Smart community resource center.
- Sec. 5. Smart Cities Challenge grant extension program.

See. 6. GAO study.

Sec. 7. Reports to Secretary of Transportation and Congress.

1 **SEC. 2. PURPOSE.**

2 The purpose of this Act is to promote the adoption
3 of smart technologies and systems to reduce transpor-
4 tation costs, traffic congestion, air pollution, energy use,
5 and carbon emissions, and enhance transportation access,
6 equity, efficiency, resilience, safety, security, and sustain-
7 ability for communities of all sizes by—

8 (1) providing assistance to local governments
9 interested in implementing smart city or community
10 transportation technologies;

11 (2) creating a smart community resource cen-
12 ter; and

13 (3) promoting the quality and performance of
14 smart city technologies while protecting—

15 (A) the physical and cyber security of data
16 and smart city technology systems; and

17 (B) privacy.

18 **SEC. 3. DEFINITIONS.**

19 In this Act:

20 (1) APPROPRIATE COMMITTEES OF CON-
21 GRESS.—The term “appropriate committees of Con-
22 gress” means—

23 (A) the Committee on Commerce, Science,
24 and Transportation of the Senate; and

(B) the Committee on Transportation and Infrastructure and the Committee on Energy and Commerce of the House of Representatives.

(3) INTELLIGENT TRANSPORTATION SYSTEM.—
The term “intelligent transportation system” means
a system that—

(B) encompasses wireless and traditional communications-based information and electronic technologies.

15 (4) LARGE-SIZED CITY.—The term “large-sized
16 city” means a beneficiary city with a population of
17 850,000 or greater, according to the most recent an-
18 nual estimates of resident population by the Bureau
19 of the Census.

1 (6) RURAL AREA.—The term “rural area”
2 means a beneficiary jurisdiction with a population
3 between 10,000 and 75,000 people, not located within
4 an urbanized area or cluster, according to the
5 most recent annual estimates of resident population
6 by the Bureau of the Census.

7 (7) SECRETARIES.—The term “Secretaries”
8 means the Secretary, acting in coordination with—
9 (A) the Secretary of Energy;
10 (B) the Secretary of Housing and Urban
11 Development; and
12 (C) the Director of the National Science
13 Foundation.

14 (8) SECRETARY.—The term “Secretary” means
15 the Secretary of Transportation.

16 (9) SECURITY SOLUTIONS.—The term “security
17 solutions” means video camera equipment, emer-
18 gency light and panic alarms, information technology
19 and information systems.

20 (10) SMALL CITY.—The term “small city”
21 means a beneficiary city with a population between
22 75,000 and 200,000, according to the most recent
23 annual estimates of resident population by the Bu-
24 reau of the Census.

25 (11) SMART CITY OR COMMUNITY.—

1 (A) IN GENERAL.—The term “smart city
2 or community” means a community in which
3 innovative, advanced, secure, and reliable infor-
4 mation and communication technologies and re-
5 lated mechanisms are applied—

6 (i) to improve the quality of life for
7 residents;

8 (ii) to reduce resource consumption by
9 increasing the efficiency and cost effective-
10 ness of civic operations and services;

11 (iii) to promote economic growth; and

12 (iv) to create a community that is
13 safer and more secure, sustainable, resil-
14 ient, livable, and workable.

15 (B) INCLUSIONS.—The term “smart city
16 or community” includes a local jurisdiction that
17 installs smart city technology that—

18 (i) gathers and incorporates data from
19 systems, devices, and sensors embedded in
20 civic systems and infrastructure to improve
21 the effectiveness and efficiency of civic op-
22 erations and services;

23 (ii) aggregates and analyzes gathered
24 data;

(iii) communicates the analysis and

data in a variety of formats;

(iv) makes corresponding improvement

ments to civic systems and services based

on gathered data; and

(v) integrates measures—

(I) to ensure the resilience of

civic systems against cybersecurity

threats and physical and social

vulnerabilities and breaches;

(II) to protect the private data of

residents; and

(III) to measure the impact of

smart city or community technologies

on the effectiveness and efficiency

civic operations and services.

(12) SMART CITY TECHNOLOGY.—The term

“smart city technology” means technology and sys-

tems that gather and incorporate data from systems,

devices, and sensors embedded in civic systems, se-

urity systems, transportation and traffic manage-

ment systems, and infrastructure to improve the ef-

effectiveness and efficiency of civic operations by—

(A) aggregating and analyzing collected

data;

(B) communicating the analysis and data in a variety of forms;

(C) corresponding improvements to civic systems and services based on gathered data;

(D) providing innovative services in multiple modes of transport and traffic management to enable users to be safer, better coordinated and connected, and better informed; and

(E) integrating measures—

(13) STATE.—The term “State” means—

18 (A) a State;

19 (B) the District of Columbia;

20 (C) the Commonwealth of Puerto Rico;

21 and

(D) any other territory or possession of the
United States.

(14) URBAN AREA.—The term "urban area" means an area designated as an urbanized area by

1 the Bureau of the Census with a population of
2 50,000 residents or more.

3 **SEC. 4. SMART COMMUNITY RESOURCE CENTER.**

4 (a) ESTABLISHMENT.—The Secretaries, in coordina-
5 tion with the heads of any other applicable Federal agen-
6 cies, shall create, publish, and make available to the public
7 online a resource center, to be known as the “Smart Com-
8 munity Resource Center”, that includes a compilation of
9 resources or links to resources for States and local com-
10 munities to use in developing and implementing—

11 (1) intelligent transportation system programs;
12 or

13 (2) smart city or community transportation
14 programs.

15 (b) INCLUSIONS.—Information provided by the re-
16 source center shall include—

17 (1) available examples of Federal guides, pro-
18 grams, and resources for intelligent transportation
19 systems or smart city or community transportation
20 programs, including technical assistance, education,
21 training, funding, and examples of intelligent trans-
22 portation systems or smart city or community trans-
23 portation programs implemented by States and local
24 communities, available from—

25 (A) the Department of Transportation;

2 (C) non-Federal sources;

3 (2) reports or databases with the results of in-
4 telligent transportation system or smart city or com-
5 munity transportation programs;

16 (5) such other resources as the Secretary deter-
17 mines to be appropriate.

18 (c) DEADLINE.—The Secretary shall establish the re-
19 source center by the date that is 1 year after the date
20 of enactment of this Act.

21 (d) UPDATES.—The Secretary shall ensure that the
22 resource center is updated on a regular basis.

23 (e) EXISTING GUIDES.—In creating, publishing, and
24 maintaining the guide under subsection (a), the Secre-
25 taries shall consider Federal guides published before, on,

1 or after the date of enactment of this Act relating to smart
2 city or community goals, activities, and best practices—
3 (1) to prevent duplication of efforts by the Fed-
4 eral Government; and
5 (2) to leverage complementary efforts in effect
6 at the time such guide is created.

7 **SEC. 5. SMART CITIES CHALLENGE GRANT EXTENSION
8 PROGRAM.**

9 (a) IN GENERAL.—Not later than 12 months after
10 the date of enactment of this Act, the Secretary of Trans-
11 portation shall develop and implement an annual competi-
12 tion for the Smart Cities Challenge under which the Sec-
13 retary shall provide grants on a competitive basis to com-
14 munities of all sizes to implement smart transportation
15 proposals and demonstrate how advanced technologies can
16 be integrated into city planning and utilized to mitigate
17 transportation challenges related to safety, mobility, and
18 climate change.

19 (b) ELIGIBILITY.—To be eligible to receive a grant
20 under this section, an entity shall be—

- 21 (1) a State or local government;
22 (2) a tribal government;
23 (3) a transit agency or authority;
24 (4) a public toll authority;
25 (5) a metropolitan planning organization;

1 (6) any other subdivision of a State or local
2 government;

3 (7) a nonprofit organization;
4 (8) a multijurisdictional group applying through
5 a single lead applicant; or

6 (9) a consortia of academic institutions apply-
7 ing through a single lead applicant.

8 (c) APPLICATIONS.—An eligible entity seeking a
9 grant under this section shall submit to the Secretary an
10 application at the time, in such manner, and containing
11 such information as the Secretary may require. An eligible
12 entity may only submit 1 application.

13 (d) PRIORITY.—In selecting eligible entities to receive
14 grants under this section, the Secretary shall prioritize ap-
15 plicants that—

16 (1) identify transportation challenges and de-
17 scribe how smart city technologies and systems can
18 address such challenges;

19 (2) determine what technologies have the most
20 potential to address the challenges identified;

21 (3) identify what data may be collected and
22 analyzed using these technologies and how such data
23 would be used to continue to address identified
24 transportation challenges;

1 (4) incorporate relevant security solutions based
2 on the scope and necessity for such smart city
3 project;

4 (5) represent diverse geographic areas of the
5 United States;

6 (6) represent communities of all sizes;

7 (7) address communities that have significant
8 underserved and disadvantaged populations; and

9 (8) comply with any other requirements that
10 the Secretary may identify.

11 (e) NON-FEDERAL SHARE.—The non-Federal share
12 of the cost of a project for which a grant is awarded under
13 this section shall be a minimum of 20 percent of the total
14 cost.

15 (f) AMOUNT OF GRANTS.—Not later than 1 year
16 after the date of enactment of this paragraph, and for
17 every fiscal year through fiscal year 2025, the Secretary
18 shall award grants to not less than 6 eligible entities. The
19 amount of a grant awarded under this section shall be a
20 minimum of \$5,000,000 and a maximum of \$40,000,000.
21 The total amount of funds awarded under this section
22 shall not exceed \$250,000,000 for one calendar year.

23 (g) PLANNING GRANTS.—The Secretary may award
24 planning grants ranging from \$50,000 to \$400,000 to as-
25 sist eligible entities in conducting research into the bene-

1 fits, challenges, and feasibility of smart city technologies
2 for communities within their jurisdiction.

3 (h) AUTHORIZATION OF APPROPRIATIONS.—There is
4 authorized to be appropriated to carry out this section
5 \$250,000,000 for each of fiscal years 2022 through 2025.
6 Additionally, the Secretary may reallocate unobligated
7 funds to carry out this section.

8 (i) COORDINATION.—The Secretary may coordinate
9 with non-profit foundations and other Federal agencies
10 funding relevant smart city efforts, including the National
11 Science Foundation, National Institutions of Standards
12 and Technology, Department of Defense, Department of
13 Energy, and other entities that the Secretary deems ap-
14 propriate.

15 **SEC. 6. GAO STUDY.**

16 Not later than 1 year after the date of enactment
17 of this Act, the Comptroller General of the United States
18 shall conduct a study to identify—

19 (1) financial and procurement mechanisms cur-
20 rently available to public and private entities to fund
21 smart city or community activities and associated
22 demonstration projects, including “pay for perform-
23 ance” financing that could deliver measurable and
24 verifiable market and non-market values to smart
25 cities or communities;

1 (2) new, innovative financial and procurement
2 mechanisms under development or used experimen-
3 tally that may be available, in the near term, to
4 public and private entities to fund smart city or
5 community activities and associated demonstration
6 projects;

7 (3) barriers to creative financing solutions for
8 those activities and projects, including procurement
9 barriers faced by State and local governments; and
10 (4) ways to leverage private sector investments
11 in smart cities and communities.

12 **SEC. 7. REPORTS TO SECRETARY OF TRANSPORTATION
13 AND CONGRESS.**

14 (a) QUARTERLY REPORT.—Each recipient of a
15 Smart Cities Challenge grant under section 5 shall submit
16 a quarterly report to the Secretary regarding the develop-
17 ment, implementation, and operation of the project.

18 (b) REPORT TO CONGRESS.—Not later than 2 years
19 after the date of enactment of this Act, and each year
20 thereafter through 2026, the Secretary shall submit to the
21 appropriate committees of Congress a report that in-
22 cludes—

23 (1) pertinent updates regarding the develop-
24 ment, list of recipients, implementation, and oper-

1 ation of projects funded under Smart Cities Chal-
2 lenge;

3 (2) the impact of such projects on the transpor-
4 tation systems within the area served by the project
5 and review of appropriate security protocols inte-
6 grated into the project;

7 (3) the impact of such projects on frontline
8 communities, including communities of color,
9 women, veterans, and the elderly;

10 (4) the extent to which the goals of the grant
11 program have been met; and

12 (5) any recommendations for revisions or im-
13 provements to the Smart Cities Challenge to guide
14 future deployment activities.

